

1990 MANAGEMENT PLAN
DUTCH HARBOR FOOD AND BAIT HERRING FISHERIES

By:

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Regional Information Report¹ 4K90-27

ALASKA DEPT. OF FISH & GAME

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AREA DESCRIPTION:

The Dutch Harbor food and bait fishery management plan applies to the following Districts of the Alaska Peninsula/Aleutian Islands management area; Unimak, Akutan, Unalaska, and that portion of the Umnak District east of Samalga Pass (See Figure 1 and Figure 2).

SEASON DATES AND FISHING PERIODS:

The Dutch Harbor food and bait herring season is from August 15 through February 28. The fishery opens 12:01 A.M. August 15 and will remain open unless changed by emergency order (see section on registration and fisheries monitoring).

GEAR RESTRICTIONS:

During the food and bait season, herring may be taken with purse seines not to exceed 250 fathoms in length and gillnets with unrestricted length. During the sac - roe season, April 15 - July 15, purse seines are limited to 100 fathoms in length and may not be more than 1,000 meshes in depth. Herring gillnets are restricted to a mesh size of 2-1/8 - 2-1/2 inches, except that gillnets with 2-1/2 - 3 inch mesh may be used under the authority of a permit issued by the Department.

HISTORICAL PERSPECTIVE:

The Dutch Harbor herring fishery has been based on a food and bait product. Historically, this fishery was conducted from 1929 through 1938 averaging 1,474 short tons. No harvest restrictions were in effect during this period and annual harvest rates reflected processing and marketing conditions (Table 1).

The most recent period of activity started in 1981. The 1981 and 1982 seasons had no regulatory harvest restrictions, however the dramatic increase in harvest in 1982 prompted the Board of Fisheries to implement a harvest ceiling of 3,525 short tons. This harvest ceiling was in effect for the 1983, 84, and 85 seasons (Table 1).

A trend of decreasing biomass and recruitment was noted in the Togiak sac - roe fishery during 1986 (Table 2). Based on a stock identification study using a scale pattern analysis over a 3 year period, Togiak spawning stocks are believed to be the main stock supporting the Dutch Harbor food and bait fishery. The board of Fisheries directed the staff to adjust the harvest ceiling commensurate with any declines noted in the Togiak spawning biomass. In 1986 the harvest ceiling was 2,453 short tons while in 1987 the ceiling was lowered to 2,332 short tons, commensurate with a declining Togiak biomass (Table 2).

CURRENT HARVEST STRATEGY:

During the November 1987 Board of Fisheries meeting a Bering Sea Herring Fisheries Management Plan was adopted. To ensure the conservation of herring stocks, it was adopted that the overall exploitation of a herring stock should not exceed 20% of the spawning biomass. In the case of the Togiak spawning stock an allocation between the sac - roe fishery, spawn on kelp fishery, and the Dutch Harbor food and bait fishery was made so that the combined exploitation of these fisheries did not exceed 20% of the spawning biomass. The number of fishermen involved and the value of the fishery were factors considered by the Board when making the allocations between the fisheries. The Bering Sea Management Plan defines under what conditions and to what extent there will be a Dutch Harbor food and bait fishery. The elements governing the food and bait fishery are listed below:

1. The Dutch Harbor food and bait fishery quota is determined through the following calculations:
 - A. The desired exploitation rate (maximum of 20%) is applied to the estimated Togiak spawning biomass. This figure represents the total combined allowable harvest to be extracted by the Togiak sac - roe fishery, spawn on kelp fishery, and the Dutch Harbor food and bait fishery.
 - B. The spawn on kelp fishery is allocated 1,500 tons of herring.
 - C. The Dutch Harbor fishery is allocated 7% of the remaining allowable harvest (after the 1,500 ton spawn on kelp allocation has been subtracted from the total allowable harvest).
 - D. The Togiak herring sac - roe harvest allocation is the remainder of the total allowable harvest after the spawn on kelp and Dutch Harbor allocation have been subtracted.
2. If the herring sac - roe harvest in the Togiak district exceeds its allocation by more than 20 percent, the department shall deduct the amount of herring that exceeds the Togiak District herring sac - roe allocation from the Dutch Harbor fishery allocation for that season.
3. If the Togiak District herring sac - roe fisheries fail to harvest their allocation the remainder of the unharvested herring will be added to the Dutch Harbor fishery allocation. When an increase of the Dutch Harbor fishery allocation is made under this section, the total allocated harvest may not exceed 3,100 short tons.

4. When the Togiak District is below its threshold (35,000 tons), the Dutch Harbor fishery will be closed for that season.

1990 DUTCH HARBOR FOOD AND BAIT HERRING HARVEST QUOTA:

The revised 1990 Togiak herring biomass for the season is 72,000 short tons. At a 20% exploitation rate, the allowable harvest is then 14,400 tons. The 1990 Togiak roe on kelp allocation is 1,500 short tons. According to the Bering Sea Herring Fisheries Management Plan adopted in November, 1987 by the Board of Fisheries, the Dutch Harbor fishery is allocated 7% of the remaining allowable harvest.

x	72,000 20%	Estimated 1990 Togiak Spawning Biomass ² desired exploitation.
-	14,400 1,500	TOTAL 1990 ALLOWABLE SAC - ROE HARVEST TOTAL 1990 ALLOWABLE ROE ON KELP HARVEST
x	7%	REMAINING ALLOWABLE HARVEST
<hr/>		
903 DUTCH HARBOR FOOD AND BAIT FISHERY		

Therefore, the 1990 Dutch Harbor food and bait herring harvest quota is 903 short tons.

REGISTRATION AND FISHERIES MONITORING:

In accordance with regulation (5 AAC 27.095), persons fishing herring in statistical area M shall obtain a permit (Figure 3) from the Department of Fish and Game before taking herring during the period August 15 through February 28. Fishermen shall register for the Dutch Harbor fishery in Dutch Harbor prior to fishing.

Each buyer and/or tender operator participating in the Dutch Harbor fishery shall register in Dutch Harbor prior to purchasing fish and are required to report as directed in the Tender Registration Form which is updated as necessary at registration (Figure 4).

The Dutch Harbor food and bait herring fleet has a large harvesting capacity. Past seasons daily catches have exceeded 800 tons, and during the 1989 season 1,000 tons were taken in two days. This large harvesting capacity will make accurate and timely monitoring of catches necessary in order to keep the actual harvest close to the harvest quota.

Due to the necessity of timely catch monitoring as described above, tenders will be required to notify the department in Dutch Harbor

² Memo from Kathy Rowell to Arnie Shaul dated June 22, 1990.

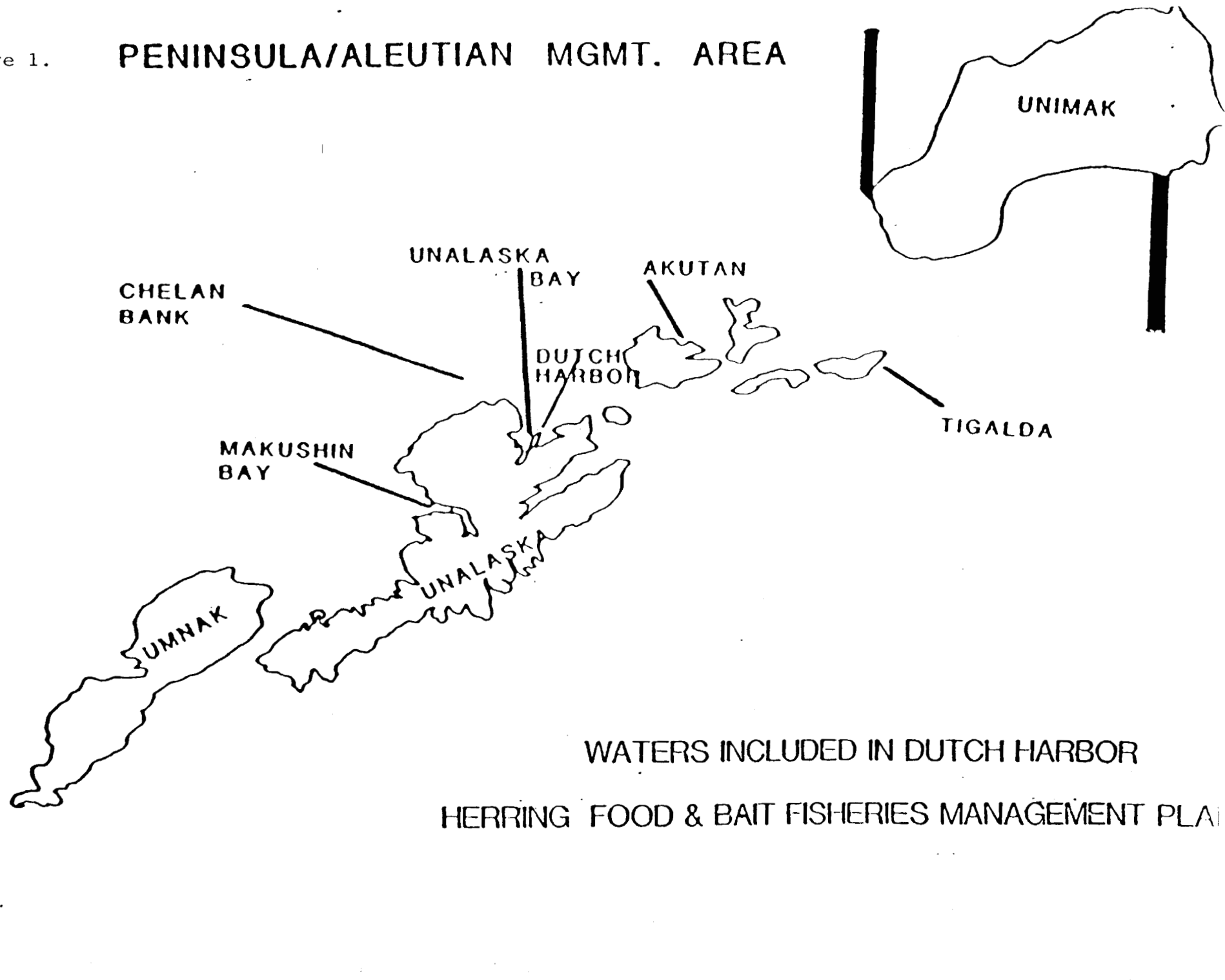
immediately after taking herring on board as well as during the daily radio schedule, specified on the Processor/Tender Registration Form.

If four or more vessels are registered for the fishery then fishing periods of set length will be announced by emergency order. Set period lengths will allow the Department to accurately tabulate the harvest prior to additional openings and will also provide the needed mechanism to help prevent large daily harvests that may exceed the harvest quota.

If the fishery is closed to tabulate harvest and the actual harvest is less than the harvest quota, then the fishery will only be reopened if fishing effort is low enough to allow an opening without the risk of an overharvest.

Figure 1.

PENINSULA/ALEUTIAN MGMT. AREA



HERRING

HERRING

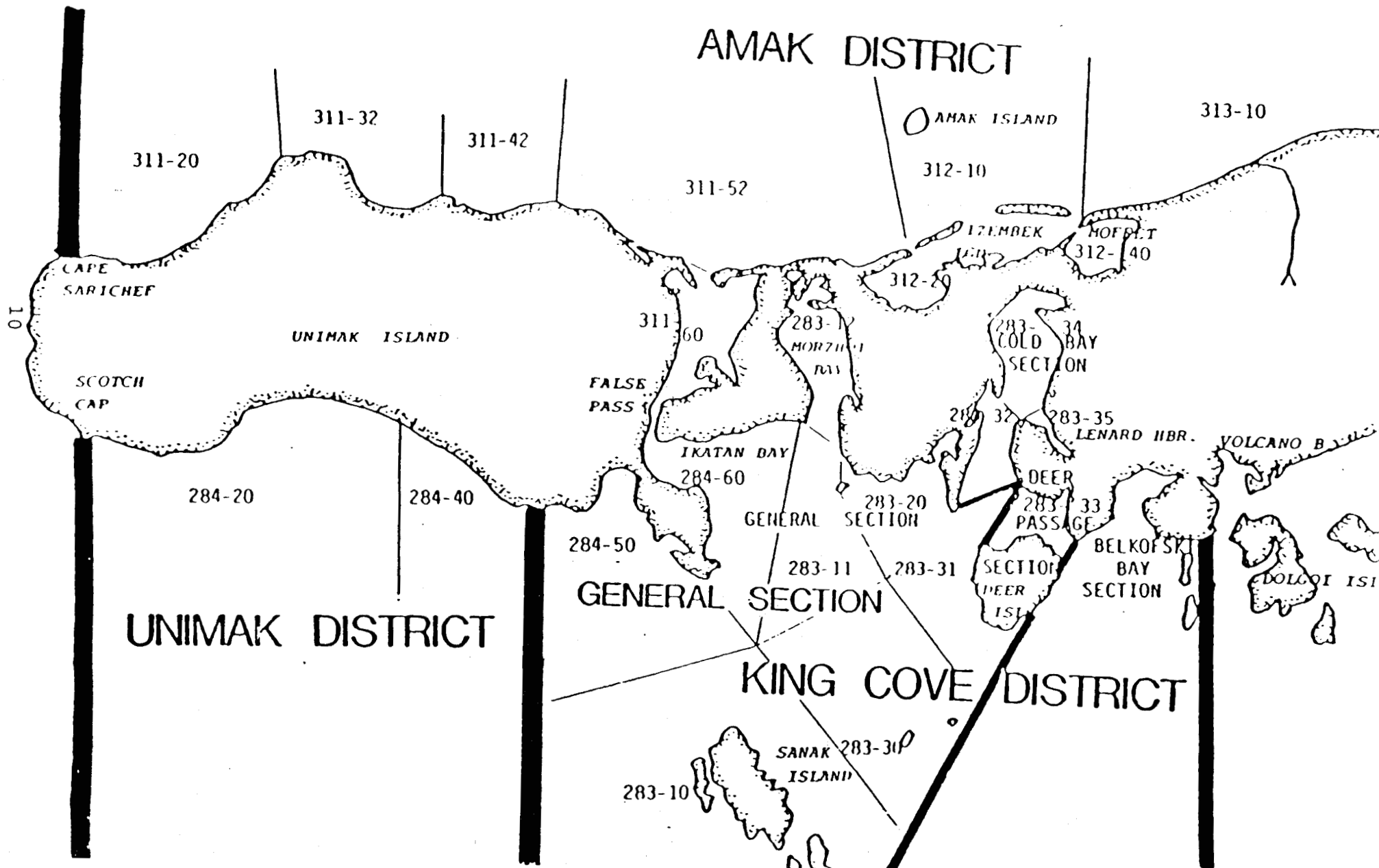
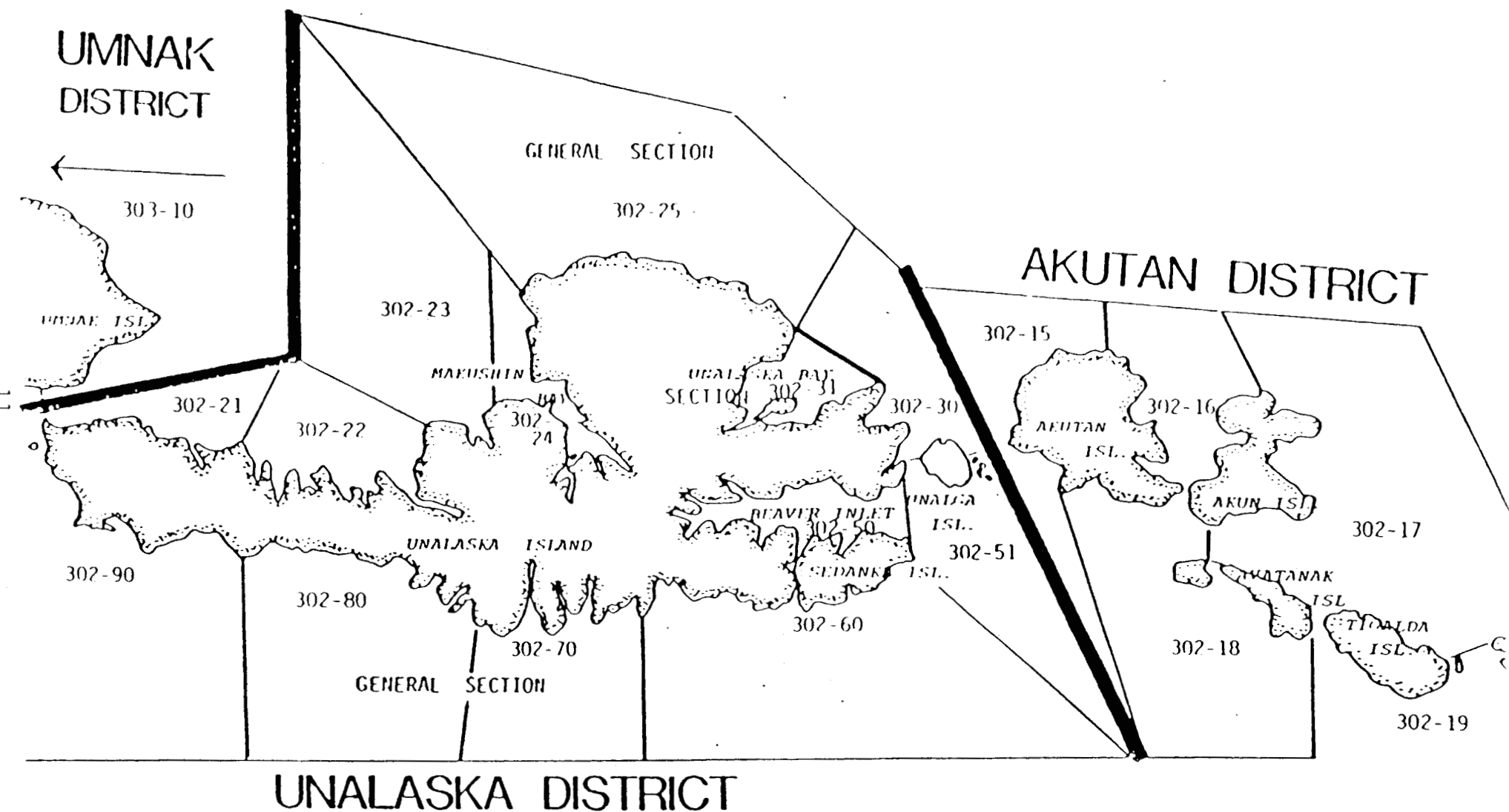


Figure 2. (cont.)

HERRING

ALASKA PENINSULA DISTRICTS & STAT NUMBERS



HERRING

ALASKA PENINSULA DISTRICTS & STAT NUMBERS

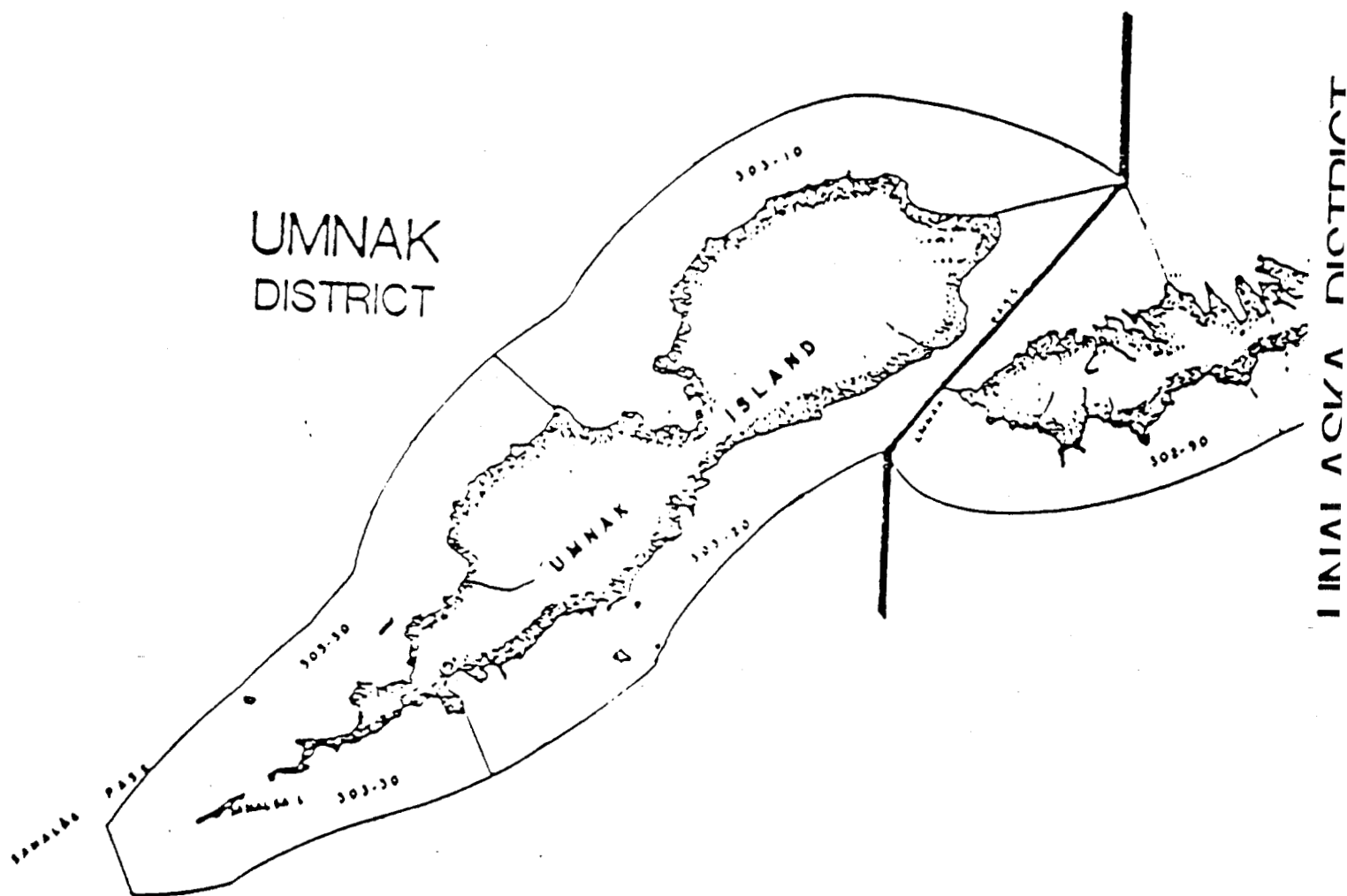


Figure 3.

WESTWARD REGION COMMERCIAL HERRING 1990 FISHERY

REGISTRATION PERMIT FOR FISHERMEN

This permit provides for commercial herring fishing as authorized by 5 AAC 27.095, Article 3, Chapter 27, for the Westward Region (which includes statistical areas K, L, and M.)

CONDITIONS OF THIS PERMIT

1. Prior to commercial herring fishing the holder of this registration permit must indicate to an ADF&G representative in the intended statistical area of operation, the following information:

EXPECTED DATES OF OPERATION: _____ STATISTICAL AREA: _____

PROCESSOR AFFILIATION (IF KNOWN): _____

FISHING VESSEL: NAME: _____ ADF&G NUMBER: _____

COLOR: _____ KEEL LENGTH: _____

CAPACITY: _____

GEAR TYPE: _____ AMOUNT OF GEAR: _____

2. WATERS CLOSED TO COMMERCIAL HERRING FISHING:

(a) During the period June through October 31, herring may not be taken in waters closed to salmon fishing - as specified in sections 5 AAC 18.350 and 5 AAC 39.290 of the Finfish Regulation Book, or, as otherwise specified by the emergency order for herring in effect during the time of fishing.

(b) During the period November 1 through February 28 there are no closed waters to commercial herring fishing unless otherwise specified by emergency order announcement.

DEPARTMENT
REPRESENTATIVE: _____

VESSEL OPERATOR: _____

TITLE: _____

ADDRESS: _____

DATE: _____ LOCATION: _____

PERMIT NUMBER: _____

.Figure 4.

DUTCH HARBOR FOOD AND BAIT HERRING
TENDER/PROCESSOR REGISTRATION FORM

NOTE: 5 AAC 27.662: Each tender operator and each buyer
shall report in person and register before commencing
operations.

Company or Tender Name: _____

Associated Tenders or Company: _____

Associated Fishing Vessels: _____

Tender Holding Capacity (Herring Tonnage) _____

Tender Overall Length: _____

Reporting Requirements _____

COMPANY REPRESENTATIVE: _____ DATE: _____

TENDER OPERATOR: _____

DEPARTMENT REPRESENTATIVE: _____

Table 1.

PENINSULA/ALEUTIANS MANAGEMENT AREA EASTERN ALEUTIAN ISLANDS HERRING
FOOD/BAIT FISHERY HISTORICAL INDUSTRY SUMMARY BY YEAR

YEAR	HARVEST IN SHORT TONS	NO. PROCESSORS	NO. BOATS	NO. LANDINGS	X TONS PER BOAT	X TONS PER LANDING	X \$ PER TON	\$ VALUE (MILLIONS)	X \$ PER VESSEL
1929	1259	*	*	*	*	*	*	*	*
1930	1916	*	*	*	*	*	*	*	*
1931	1056	12	26	*	*	*	*	*	*
1932	2510	12	30	*	*	*	*	*	*
1933	1585	12	38	*	*	*	*	*	*
1934	1533	9	*	*	*	*	*	*	*
1935	2412	10	*	*	*	*	*	*	*
1936	1379	8	*	*	*	*	*	*	*
1937	579	*	*	*	*	*	*	*	*
1938	513	*	*	*	*	*	*	*	*
1939-44 NO FISHERY									
1945	75	*	*	*	*	*	*	*	*
1946-80 NO FISHERY									
1981	704	2	2	16	352	44	300	0.211	0.11
1982	3565	6	7	95	509.3	37.5	300	1.02	0.15
1983	3567	5	8	96	445.9	37.2	232	8.828	0.10
1984	3578	5	9	61	397.6	58.7	210	0.751	0.68
1985	3480	3	6	78	560	44.6	162	0.564	0.09
1986	2394	4	7	53	342	45.2	254	0.600	0.09
1987	2503	4	8 ^a	45	373	55.6	300	0.751	0.09
1988	2004	6	8 ^a	59	251	34.0	252	0.505	0.06
1989	3081	5	9 ^b	69	342	45.0	283	0.873	0.09

^aSeven seiners and one gill netter participated.

^bSeven seiners and two gill netters participated.

Table 2. DUTCH HARBOR FOOD AND BAIT HERRING FISHERY (SHORT TONS)

YEAR	PRESEASON TOGIAK SPAWNING BIOMASS	HARVEST QUOTA	FOOD AND BAIT HARVEST	% SPAWNING BIOMASS HARVESTED
1981	159,000	NONE	704	.4%
1982	98,000	NONE	3,565	3.6%
1983	142,000	3,525 ^a	3,567	2.5%
1984	115,000	3,525	3,578	3.1%
1985	132,000	3,525	3,480	2.6%
1986	96,000	2,453 ^b	2,394	2.5%
1987	88,000	2,332	2,503	2.8%
1988	132,000	3,100 ^c	2,004	1.6%
1989	100,108	3,100	3,081	3.0%
1990	72,000	903	N/A	N/A

^aHarvest ceiling of 3,525 established by Board of Fisheries.

^bHarvest quota set by ADF&G. Reduced proportionate with the drop from the 1985 Togiak spawning biomass level.

^cHarvest quota set under provisions of the Bering Sea Herring Fisheries Management Plan.

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